

Supplemental Table 1: Sensitivity Analysis 1 and 2

| | Observed vs. Predicted Comparisons Protocol O Validation Data | | | |
|---|--|-------------------------------|-------------------------------------|-------------------------------|
| | Sensitivity Analysis 1 ^a | | Sensitivity Analysis 2 ^b | |
| No. eyes | n = 56 | | n = 56 | |
| No. meas. pairs | N = 112 | N = 112 | N = 112 | N = 112 |
| CST, μm | Spectralis | Cirrus | Spectralis | Cirrus |
| Mean (SD) | 394 (135) | 372 (140) | 394 (135) | 372 (140) |
| Median (IQR) | 347 (306, 434) | 336 (283, 400) | 347 (306, 434) | 336 (283, 400) |
| Compared to CST, μm | Predicted Spectralis ^c | Predicted Cirrus ^d | Predicted Spectralis ^e | Predicted Cirrus ^f |
| Mean (SD) | 393 (133) | 370 (126) | 393 (133) | 372 (127) |
| Median (IQR) | 359 (308, 419) | 326 (287, 407) | 356 (308, 420) | 328 (289, 410) |
| Absolute difference, μm , % ^g | | | | |
| Min | 0, 0% | 0, 0% | 0, 0% | 0, 0% |
| 5th percentile | 2, 0% | 1, 0% | 2, 0% | 1, 0% |
| 10th percentile | 2, 1% | 2, 1% | 3, 1% | 2, 1% |
| 25th percentile | 6, 2% | 5, 1% | 6, 2% | 5, 1% |
| Mean | 21, 5% | 21, 6% | 22, 5% | 21, 6% |
| Median | 13, 4% | 10, 3% | 12, 4% | 9, 3% |
| 75th percentile | 20, 6% | 24, 6% | 21, 6% | 22, 6% |
| 90th percentile | 48, 10% | 47, 13% | 47, 10% | 50, 11% |
| 95th percentile | 83, 18% | 83, 19% | 89, 18% | 89, 20% |
| Max | 184, 49% | 195, 61% | 190, 51% | 195, 64% |
| Difference, μm , % ^g | | | | |
| Min | -143, -35% | -195, -36% | -143, -35% | -195, -36% |
| 5th percentile | -58, -16% | -47, -10% | -61, -17% | -50, -11% |
| 10th percentile | -36, -8% | -30, -5% | -39, -7% | -27, -5% |
| 25th percentile | -9, -2% | -11, -4% | -10, -3% | -9, -3% |
| Mean | -1, 0% | -3, 1% | -1, 0% | -0, 1% |
| Median | 4, 1% | -4, -1% | 5, 1% | -2, -1% |
| 75th percentile | 14, 4% | 6, 2% | 13, 4% | 9, 3% |
| 90th percentile | 20, 6% | 30, 8% | 20, 6% | 31, 9% |
| 95th percentile | 35, 8% | 58, 17% | 43, 8% | 60, 20% |
| Max | 184, 49% | 146, 61% | 190, 51% | 152, 64% |

^a In Sensitivity Analysis 1, the conversion equations were estimated from the training data when two levels of random effects (participant and eye) were specified.

^b In sensitivity analysis 2, the conversion equations were estimated from the training data when sex and sex-instrument interaction terms were included in the regression equation, and one level of random effects (eye) were specified.

^c Predicted Spectralis = $40.09 + 0.95 \times \text{Cirrus}$

^d Predicted Cirrus = $3.24 + 0.94 \times \text{Spectralis}$

^e Predicted Spectralis = $36.16 + 12.28 \times \text{Female} + 0.97 \times \text{Cirrus} - 0.05 \times \text{Cirrus} \times \text{Female}$

^f Predicted Cirrus = $6.07 - 12.39 \times \text{Female} + 0.92 \times \text{Spectralis} + 0.05 \times \text{Spectralis} \times \text{Female}$

^gDifferences were calculated as (Predicted – Observed value) and relative differences as [(Predicted – Observed value)/Observed value]*100%.